

Title (en)
Ultrasound handpiece

Title (de)
Ultraschallhandstück

Title (fr)
Pièce à main à ultrasons

Publication
EP 1679053 A3 20081231 (EN)

Application
EP 06112725 A 20010723

Priority
• EP 01955924 A 20010723
• US 62529400 A 20000725

Abstract (en)
[origin: WO0207658A1] A handpiece having a set of longitudinally vibrating piezoelectric elements (21) and which may additionally have an electric motor (114) to provide rotational or oscillatory movement to the ultrasound horn. The piezoelectric elements (21) are surrounded by a high temperature plastic sleeve (39), and the sleeve is filled with high temperature potting material (141). The potting material seal the piezoelectric elements against moisture without affecting the performance of the piezoelectric elements.

IPC 8 full level
A61B 18/00 (2006.01); **A61F 9/007** (2006.01); **A61B 19/00** (2006.01)

CPC (source: EP US)
A61F 9/00745 (2013.01 - EP US); **A61B 2090/0813** (2016.02 - EP US); **A61F 9/00763** (2013.01 - EP US)

Citation (search report)
• [XAY] EP 0490085 A1 19920617 - STORZ INSTR CO [US], et al
• [XA] US 5364405 A 19941115 - ZALESKI EDWARD R [US]
• [YD] US 5911699 A 19990615 - ANIS AZIZ Y [US], et al
• [A] US 5061238 A 19911029 - SHULER DONALD K [US]
• [A] US 5505693 A 19960409 - MACKOOL RICHARD J [US]

Cited by
CN111407415A; EP2011458A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0207658 A1 20020131; AT E339171 T1 20061015; AT E450235 T1 20091215; AU 775726 B2 20040812; AU 7797401 A 20020205; BR 0107030 A 20020521; BR 0107030 B1 20101130; BR 0117279 B1 20111004; BR PI0117279 B8 20210622; CA 2382361 A1 20020131; CA 2382361 C 20081223; DE 60123002 D1 20061026; DE 60123002 T2 20070308; DE 60140702 D1 20100114; DK 1212021 T3 20070115; EP 1212021 A1 20020612; EP 1212021 B1 20060913; EP 1679053 A2 20060712; EP 1679053 A3 20081231; EP 1679053 B1 20091202; ES 2272513 T3 20070501; ES 2334154 T3 20100305; IL 148824 A 20071031; JP 2004504103 A 20040212; JP 4116426 B2 20080709; PT 1212021 E 20070131; US 2002138080 A1 20020926; US 6478766 B1 20021112; US 6602193 B2 20030805

DOCDB simple family (application)
US 0123194 W 20010723; AT 01955924 T 20010723; AT 06112725 T 20010723; AU 7797401 A 20010723; BR 0107030 A 20010723; BR 0117279 A 20010723; CA 2382361 A 20010723; DE 60123002 T 20010723; DE 60140702 T 20010723; DK 01955924 T 20010723; EP 01955924 A 20010723; EP 06112725 A 20010723; ES 01955924 T 20010723; ES 06112725 T 20010723; IL 14882402 A 20020321; JP 2002513396 A 20010723; PT 01955924 T 20010723; US 15305602 A 20020522; US 62529400 A 20000725